William A Banks

List of Publications by Citations

536 papers	35,477 citations	98 h-index	165 g-index
567 ext. papers	39,733 ext. citations	5.6 avg, IF	7.85 L-index

#	Paper	IF	Citations
536	Leptin enters the brain by a saturable system independent of insulin. *Peptides*, **1996**, 17, 305-11	3.8	1022
535	Transport of brain-derived neurotrophic factor across the blood-brain barrier. *Neuropharmacology*, **1998**, 37, 1553-61	5.5	976
534	Ghrelin controls hippocampal spine synapse density and memory performance. *Nature Neuroscience* , **2006**, 9, 381-8	25.5	645
533	Glucagon-like peptide-1 receptor is involved in learning and neuroprotection. *Nature Medicine*, **2003**, 9, 1173-9	50.5	606
532	Passage of cytokines across the blood-brain barrier. *NeuroImmunoModulation*, **1995**, 2, 241-8	2.5	544
531	Extent and direction of ghrelin transport across the blood-brain barrier is determined by its unique primary structure. *Journal of Pharmacology and Experimental Therapeutics*, **2002**, 302, 822-7	4.7	536
530	From blood-brain barrier to blood-brain interface: new opportunities for CNS drug delivery. *Nature Reviews Drug Discovery*, **2016**, 15, 275-92	64.1	534
529	Murine tumor necrosis factor alpha is transported from blood to brain in the mouse. *Journal of Neuroimmunology*, **1993**, 47, 169-76	3.5	482
528	Brain-immune communication pathways. *Brain, Behavior, and Immunity*, **2007**, 21, 727-35	16.6	418
527	Triglycerides induce leptin resistance at the blood-brain barrier. *Diabetes*, **2004**, 53, 1253-60	0.9	386
526	Characteristics of compounds that cross the blood-brain barrier. *BMC Neurology*, **2009**, 9 Suppl 1, S3	3.1	378
525	Strategies to advance translational research into brain barriers. *Lancet Neurology, The*, **2008**, 7, 84-96	24.1	370
524	Blood-brain barrier transport of cytokines: a mechanism for neuropathology. *Current Pharmaceutical Design*, **2005**, 11, 973-84	3.3	357
523	The blood-brain barrier and immune function and dysfunction. *Neurobiology of Disease*, **2010**, 37, 26-32	7.5	355
522	The source of cerebral insulin. *European Journal of Pharmacology*, **2004**, 490, 5-12	5.3	353
521	Penetration of interleukin-6 across the murine blood-brain barrier. *Neuroscience Letters*, **1994**, 179, 53-6	3.3	353
520	Plasma exosomal □synuclein is likely CNS-derived and increased in Parkinson's disease. *Acta Neuropathologica*, **2014**, 128, 639-650	14.3	348

519	Clinical depression and inflammatory risk markers for coronary heart disease. *American Journal of Cardiology*, **2002**, 90, 1279-83	3	345
518	The antioxidants alpha-lipoic acid and N-acetylcysteine reverse memory impairment and brain oxidative stress in aged SAMP8 mice. *Journal of Neurochemistry*, **2003**, 84, 1173-83	6	342
517	Insulin in the brain: there and back again. *Pharmacology & Therapeutics*, **2012**, 136, 82-93	13.9	340
516	Blood-brain barrier dysfunction as a cause and consequence of Alzheimer's disease. *Journal of Cerebral Blood Flow and Metabolism*, **2013**, 33, 1500-13	7.3	339
515	Bidirectional transport of interleukin-1 alpha across the blood-brain barrier. *Brain Research Bulletin*, **1989**, 23, 433-7	3.9	316
514	Animal-assisted therapy and loneliness in nursing homes: use of robotic versus living dogs. *Journal of the American Medical Directors Association*, **2008**, 9, 173-7	5.9	299
513	Obesity and hypertriglyceridemia produce cognitive impairment. *Endocrinology*, **2008**, 149, 2628-36	4.8	278
512	Lipopolysaccharide-induced blood-brain barrier disruption: roles of cyclooxygenase, oxidative stress, neuroinflammation, and elements of the neurovascular unit. *Journal of Neuroinflammation*, **2015**, 12, 223	10.1	270
511	Impaired transport of leptin across the blood-brain barrier in obesity. *Peptides*, **1999**, 20, 1341-5	3.8	270
510	Peptides and the blood-brain barrier: lipophilicity as a predictor of permeability. *Brain Research Bulletin*, **1985**, 15, 287-92	3.9	265
509	Macrophage exosomes as natural nanocarriers for protein delivery to inflamed brain. *Biomaterials*, **2017**, 142, 1-12	15.6	252
508	Differential permeability of the blood-brain barrier to two pancreatic peptides: insulin and amylin. *Peptides*, **1998**, 19, 883-9	3.8	248
507	Effects of leptin on memory processing. *Peptides*, **2006**, 27, 1420-5	3.8	247
506	Transport of insulin across the blood-brain barrier: saturability at euglycemic doses of insulin. *Peptides*, **1997**, 18, 1423-9	3.8	237
505	Role of the immune system in HIV-associated neuroinflammation and neurocognitive implications. *Brain, Behavior, and Immunity*, **2015**, 45, 1-12	16.6	215
504	Minimal penetration of lipopolysaccharide across the murine blood-brain barrier. *Brain, Behavior, and Immunity*, **2010**, 24, 102-9	16.6	210
503	Reduction of amyloid load and cerebral damage in a transgenic mouse model of Alzheimer's disease by treatment with a beta-sheet breaker peptide. *FASEB Journal*, **2002**, 16, 860-2	0.9	202
502	Obesity-prone rats have normal blood-brain barrier transport but defective central leptin signaling before obesity onset. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2004**, 286, R143-50	3.2	200

501	Characterizaton of short isoforms of the leptin receptor in rat cerebral microvessels and of brain uptake of leptin in mouse models of obesity. *Endocrinology*, **2002**, 143, 775-83	4.8	199
500	Pathways linking depression, adiposity, and inflammatory markers in healthy young adults. *Brain, Behavior, and Immunity*, **2003**, 17, 276-85	16.6	198
499	Prevention of ischemia-induced death of hippocampal neurons by pituitary adenylate cyclase activating polypeptide. *Brain Research*, **1996**, 736, 280-6	3.7	196
498	Release of cytokines by brain endothelial cells: A polarized response to lipopolysaccharide. *Brain, Behavior, and Immunity*, **2006**, 20, 449-55	16.6	193
497	The effects of animal-assisted therapy on loneliness in an elderly population in long-term care facilities. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2002**, 57, M428-32	6.4	185
496	Effect of LPS on the permeability of the blood-brain barrier to insulin. *Brain Research*, **2001**, 896, 36-42	3.7	180
495	Lipopolysaccharide alters the blood-brain barrier transport of amyloid beta protein: a mechanism for inflammation in the progression of Alzheimer's disease. *Brain, Behavior, and Immunity*, **2009**, 23, 507-17	16.6	179
494	Permeability of the blood-brain and blood-spinal cord barriers to interferons. *Journal of Neuroimmunology*, **1997**, 76, 105-11	3.5	174
493	Selective, physiological transport of insulin across the blood-brain barrier: novel demonstration by species-specific radioimmunoassays. *Peptides*, **1997**, 18, 1257-62	3.8	170
492	Cytokine and chemokine responses in serum and brain after single and repeated injections of lipopolysaccharide: multiplex quantification with path analysis. *Brain, Behavior, and Immunity*, **2011**, 25, 1637-48	16.6	166
491	Entry of blood-borne cytokines into the central nervous system: effects on cognitive processes. *NeuroImmunoModulation*, **2002**, 10, 319-27	2.5	166
490	Passage of amyloid beta protein antibody across the blood-brain barrier in a mouse model of Alzheimer's disease. *Peptides*, **2002**, 23, 2223-6	3.8	163
489	Site-directed antisense oligonucleotide decreases the expression of amyloid precursor protein and reverses deficits in learning and memory in aged SAMP8 mice. *Peptides*, **2000**, 21, 1769-75	3.8	162
488	Impaired transport of leptin across the blood-brain barrier in obesity is acquired and reversible. *American Journal of Physiology - Endocrinology and Metabolism*, **2003**, 285, E10-5	6	159
487	Pharmacological profiles of peptide drug candidates for the treatment of Alzheimer's disease. *Journal of Biological Chemistry*, **2003**, 278, 13905-11	5.4	151
486	Tumor necrosis factor-alpha: a neuromodulator in the CNS. *Neuroscience and Biobehavioral Reviews*, **1997**, 21, 603-13	9	150
485	Expression of TNF and the necessity of TNF receptors in bleomycin-induced lung injury in mice. *Experimental Lung Research*, **1998**, 24, 721-43	2.3	149
484	Aluminum-induced neurotoxicity: alterations in membrane function at the blood-brain barrier. *Neuroscience and Biobehavioral Reviews*, **1989**, 13, 47-53	9	149

483	The blood-brain barrier in neuroimmunology: Tales of separation and assimilation. *Brain, Behavior, and Immunity*, **2015**, 44, 1-8	16.6	145
482	HIV-1 viral proteins gp120 and Tat induce oxidative stress in brain endothelial cells. *Brain Research*, **2005**, 1045, 57-63	3.7	143
481	The S1 protein of SARS-CoV-2 crosses the blood-brain barrier in mice. *Nature Neuroscience*, **2021**, 24, 368-378	25.5	143
480	Neuroinflammation: a common pathway in CNS diseases as mediated at the blood-brain barrier. *NeuroImmunoModulation*, **2012**, 19, 121-30	2.5	142
479	Brain microvascular pericytes are immunoactive in culture: cytokine, chemokine, nitric oxide, and LRP-1 expression in response to lipopolysaccharide. *Journal of Neuroinflammation*, **2011**, 8, 139	10.1	142
478	Permeability of the blood-brain barrier to neurotrophins. *Brain Research*, **1998**, 788, 87-94	3.7	141
477	Characterization of blood-brain barrier permeability to PYY3-36 in the mouse. *Journal of Pharmacology and Experimental Therapeutics*, **2003**, 306, 948-53	4.7	141
476	Quantitative proteomics analysis of specific protein expression and oxidative modification in aged senescence-accelerated-prone 8 mice brain. *Neuroscience*, **2004**, 126, 915-26	3.9	138
475	Permeability of the blood-brain barrier to amylin. *Life Sciences*, **1995**, 57, 1993-2001	6.8	138
474	Blood-borne interleukin-1 receptor antagonist crosses the blood-brain barrier. *Journal of Neuroimmunology*, **1994**, 55, 153-60	3.5	138
473	Blood to brain transport of interleukin links the immune and central nervous systems. *Life Sciences*, **1991**, 48, PL117-21	6.8	138
472	Neuroimmune Axes of the Blood-Brain Barriers and Blood-Brain Interfaces: Bases for Physiological Regulation, Disease States, and Pharmacological Interventions. *Pharmacological Reviews*, **2018**, 70, 278-314	22.5	134
471	Physiology and pathology of the blood-brain barrier: implications for microbial pathogenesis, drug delivery and neurodegenerative disorders. *Journal of NeuroVirology*, **1999**, 5, 538-55	3.9	134
470	Developmentally regulated mannose 6-phosphate receptor-mediated transport of a lysosomal enzyme across the blood-brain barrier. *Proceedings of the National Academy of Sciences of the United States of America*, **2004**, 101, 12658-63	11.5	131
469	Angiotensin II modulates BBB permeability via activation of the AT(1) receptor in brain endothelial cells. *Journal of Cerebral Blood Flow and Metabolism*, **2009**, 29, 640-7	7.3	130
468	Peptides crossing the blood-brain barrier: some unusual observations. *Brain Research*, **1999**, 848, 96-100	3.7	129
467	The many lives of leptin. *Peptides*, **2004**, 25, 331-8	3.8	125
466	Permeability of the blood-brain barrier to a novel satiety molecule nesfatin-1. *Peptides*, **2007**, 28, 2372-83	3.8	123

465	The neurotrophins and their receptors: structure, function, and neuropathology. *Neuroscience and Biobehavioral Reviews*, **1994**, 18, 143-59	9	123
464	Permeability of the blood-brain barrier to HIV-1 Tat. *Experimental Neurology*, **2005**, 193, 218-27	5.7	120
463	Brain uptake of the glucagon-like peptide-1 antagonist exendin(9-39) after intranasal administration. *Journal of Pharmacology and Experimental Therapeutics*, **2004**, 309, 469-75	4.7	120
462	A Physiological Role for Amyloid-□Protein: Enhancement of Learning and Memory. *Journal of Alzheimeris Disease*, **2010**, 19, 441-449	4.3	119
461	Transmission of □synuclein-containing erythrocyte-derived extracellular vesicles across the blood-brain barrier via adsorptive mediated transcytosis: another mechanism for initiation and progression of Parkinson's disease?. *Acta Neuropathologica Communications*, **2017**, 5, 71	7.3	118
460	Permeability of the blood-brain barrier to neuropeptides: the case for penetration. *Psychoneuroendocrinology*, **1985**, 10, 385-99	5	118
459	Effect of diabetes mellitus on the permeability of the blood-brain barrier to insulin. *Peptides*, **1997**, 18, 1577-84	3.8	117
458	Intranasal Delivery of Proteins and Peptides in the Treatment of Neurodegenerative Diseases. *AAPS Journal*, **2015**, 17, 780-7	3.7	116
457	Leptin transport across the blood-brain barrier: implications for the cause and treatment of obesity. *Current Pharmaceutical Design*, **2001**, 7, 125-33	3.3	114
456	Drug delivery to the brain in Alzheimer's disease: consideration of the blood-brain barrier. *Advanced Drug Delivery Reviews*, **2012**, 64, 629-39	18.5	113
455	Effects of triglycerides, obesity, and starvation on ghrelin transport across the blood-brain barrier. *Peptides*, **2008**, 29, 2061-5	3.8	112
454	Passage of erythropoietic agents across the blood-brain barrier: a comparison of human and murine erythropoietin and the analog darbepoetin alfa. *European Journal of Pharmacology*, **2004**, 505, 93-101	5.3	112
453	Antisense directed at the Abeta region of APP decreases brain oxidative markers in aged senescence accelerated mice. *Brain Research*, **2004**, 1018, 86-96	3.7	112
452	The Transport Mechanism of Extracellular Vesicles at the Blood-Brain Barrier. *Current Pharmaceutical Design*, **2017**, 23, 6206-6214	3.3	112
451	Upregulation of the p75 but not the p55 TNF-alpha receptor mRNA after silica and bleomycin exposure and protection from lung injury in double receptor knockout mice. *American Journal of Respiratory Cell and Molecular Biology*, **1999**, 20, 825-33	5.7	111
450	Ghrelin-induced feeding is dependent on nitric oxide. *Peptides*, **2003**, 24, 913-8	3.8	110
449	Enhanced leptin transport across the blood-brain barrier by alpha 1-adrenergic agents. *Brain Research*, **2001**, 899, 209-17	3.7	109
448	Fate of leptin after intracerebroventricular injection into the mouse brain. *Endocrinology*, **1998**, 139, 4556-62	4.8	105

447	Decreased levels of PSD95 and two associated proteins and increased levels of BCl2 and caspase 3 in hippocampus from subjects with amnestic mild cognitive impairment: Insights into their potential roles for loss of synapses and memory, accumulation of Abeta, and neurodegeneration in a prodromal stage of Alzheimer's disease. *Journal of Neuroscience Research*, **2010**, 88, 469-77	4.4	103
446	Proteomic analysis of specific brain proteins in aged SAMP8 mice treated with alpha-lipoic acid: implications for aging and age-related neurodegenerative disorders. *Neurochemistry International*, **2005**, 46, 159-68	4.4	103
445	Effects of orexin-A on memory processing. *Peptides*, **2002**, 23, 1683-8	3.8	103
444	Unidirectional specific and modulated brain to blood transport of corticotropin-releasing hormone. *Neuroendocrinology*, **1996**, 63, 338-48	5.6	102
443	Transport of human immunodeficiency virus type 1 pseudoviruses across the blood-brain barrier: role of envelope proteins and adsorptive endocytosis. *Journal of Virology*, **2001**, 75, 4681-91	6.6	101
442	Alpha synuclein is transported into and out of the brain by the blood-brain barrier. *Peptides*, **2014**, 62, 197-202	3.8	99
441	Intrathecal delivery of protein therapeutics to the brain: a critical reassessment. *Pharmacology & Therapeutics*, **2014**, 144, 114-22	13.9	99
440	Brain meets body: the blood-brain barrier as an endocrine interface. *Endocrinology*, **2012**, 153, 4111-9	4.8	99
439	CNS tau efflux via exosomes is likely increased in Parkinson's disease but not in Alzheimer's disease. *Alzheimeris and Dementia*, **2016**, 12, 1125-1131	1.2	99
438	Peroxisome proliferator-activated receptor-gamma-mediated positive energy balance in the rat is associated with reduced sympathetic drive to adipose tissues and thyroid status. *Endocrinology*, **2008**, 149, 2121-30	4.8	97
437	Saturable transport of peptides across the blood-brain barrier. *Life Sciences*, **1987**, 41, 1319-38	6.8	97
436	Gut reactions: How the blood-brain barrier connects the microbiome and the brain. *Experimental Biology and Medicine*, **2018**, 243, 159-165	3.7	97
435	Passage of peptides across the blood-brain barrier: pathophysiological perspectives. *Life Sciences*, **1996**, 59, 1923-43	6.8	95
434	Passage of human amyloid beta-protein 1-40 across the murine blood-brain barrier. *Life Sciences*, **1994**, 55, 1643-50	6.8	95
433	Carrier-mediated transport of vasopressin across the blood-brain barrier of the mouse. *Journal of Neuroscience Research*, **1987**, 18, 326-32	4.4	95
432	Oxidative modification to LDL receptor-related protein 1 in hippocampus from subjects with Alzheimer disease: implications for A□accumulation in AD brain. *Free Radical Biology and Medicine*, **2010**, 49, 1798-803	7.8	93
431	Effects of N-acetylcysteine amide (NACA), a novel thiol antioxidant against glutamate-induced cytotoxicity in neuronal cell line PC12. *Brain Research*, **2005**, 1056, 132-8	3.7	93
430	Partial saturation and regional variation in the blood-to-brain transport of leptin in normal weight mice. *American Journal of Physiology - Endocrinology and Metabolism*, **2000**, 278, E1158-65	6	92

429	Is obesity a disease of the blood-brain barrier? Physiological, pathological, and evolutionary considerations. *Current Pharmaceutical Design*, **2003**, 9, 801-9	3.3	92
428	Extra virgin olive oil improves learning and memory in SAMP8 mice. *Journal of Alzheimeris Disease*, **2012**, 28, 81-92	4.3	91
427	HIV proteins (gp120 and Tat) and methamphetamine in oxidative stress-induced damage in the brain: potential role of the thiol antioxidant N-acetylcysteine amide. *Free Radical Biology and Medicine*, **2010**, 48, 1388-98	7.8	91
426	Leptin transport across the blood-brain barrier of the Koletsky rat is not mediated by a product of the leptin receptor gene. *Brain Research*, **2002**, 950, 130-6	3.7	91
425	Testing the neurovascular hypothesis of Alzheimer's disease: LRP-1 antisense reduces blood-brain barrier clearance, increases brain levels of amyloid-beta protein, and impairs cognition. *Journal of Alzheimeris Disease*, **2009**, 17, 553-70	4.3	91
424	A novel antioxidant N-acetylcysteine amide prevents gp120- and Tat-induced oxidative stress in brain endothelial cells. *Experimental Neurology*, **2006**, 201, 193-202	5.7	90
423	A brain-to-blood carrier-mediated transport system for small, N-tyrosinated peptides. *Pharmacology Biochemistry and Behavior*, **1984**, 21, 943-6	3.9	88
422	Pegylated leptin antagonist is a potent orexigenic agent: preparation and mechanism of activity. *Endocrinology*, **2009**, 150, 3083-91	4.8	86
421	Topiramate treatment protects blood-brain barrier pericytes from hyperglycemia-induced oxidative damage in diabetic mice. *Endocrinology*, **2012**, 153, 362-72	4.8	85
420	The blood-brain barrier as a cause of obesity. *Current Pharmaceutical Design*, **2008**, 14, 1606-14	3.3	85
419	Studies of the slow bidirectional transport of iron and transferrin across the blood-brain barrier. *Brain Research Bulletin*, **1988**, 21, 881-5	3.9	85
418	The blood-brain barrier in neuroAIDS. *Current HIV Research*, **2006**, 4, 259-66	1.3	84
417	Permeability of the blood-brain barrier to soluble cytokine receptors. *NeuroImmunoModulation*, **1995**, 2, 161-5	2.5	84
416	Triglycerides cross the blood-brain barrier and induce central leptin and insulin receptor resistance. *International Journal of Obesity*, **2018**, 42, 391-397	5.5	83
415	Starvation and triglycerides reverse the obesity-induced impairment of insulin transport at the blood-brain barrier. *Endocrinology*, **2008**, 149, 3592-7	4.8	83
414	Blood to brain and brain to blood passage of native horseradish peroxidase, wheat germ agglutinin, and albumin: pharmacokinetic and morphological assessments. *Journal of Neurochemistry*, **1994**, 62, 2404-19	6	83
413	Aluminum complexing enhances amyloid beta protein penetration of blood-brain barrier. *Brain Research*, **2006**, 1116, 215-21	3.7	83
412	Transport of Extracellular Vesicles across the Blood-Brain Barrier: Brain Pharmacokinetics and Effects of Inflammation. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	82

411	Blood-brain barrier permeability to ebiratide and TNF in acute spinal cord injury. *Experimental Neurology*, **1997**, 146, 367-73	5.7	81
410	Frailty and the aging male. *Aging Male*, **2005**, 8, 135-40	2.1	81
409	Permeability of the murine blood-brain barrier to some octapeptide analogs of somatostatin. *Proceedings of the National Academy of Sciences of the United States of America*, **1990**, 87, 6762-6	11.5	81
408	Lipopolysaccharide impairs amyloid β efflux from brain: altered vascular sequestration, cerebrospinal fluid reabsorption, peripheral clearance and transporter function at the blood-brain barrier. *Journal of Neuroinflammation*, **2012**, 9, 150	10.1	80
407	Efflux of human and mouse amyloid beta proteins 1-40 and 1-42 from brain: impairment in a mouse model of Alzheimer's disease. *Neuroscience*, **2003**, 121, 487-92	3.9	80
406	Delivery of galanin-like peptide to the brain: targeting with intranasal delivery and cyclodextrins. *Journal of Pharmacology and Experimental Therapeutics*, **2008**, 325, 513-9	4.7	79
405	Anti-amyloid beta protein antibody passage across the blood-brain barrier in the SAMP8 mouse model of Alzheimer's disease: an age-related selective uptake with reversal of learning impairment. *Experimental Neurology*, **2007**, 206, 248-56	5.7	79
404	Central Nervous System Delivery of Intranasal Insulin: Mechanisms of Uptake and Effects on Cognition. *Journal of Alzheimeris Disease*, **2015**, 47, 715-28	4.3	78
403	N-Acetylcysteine amide protects against methamphetamine-induced oxidative stress and neurotoxicity in immortalized human brain endothelial cells. *Brain Research*, **2009**, 1275, 87-95	3.7	77
402	The effects of group and individual animal-assisted therapy on loneliness in residents of long-term care facilities. *Anthrozoos*, **2005**, 18, 396-408	2.4	77
401	Interleukin-1 alpha in blood has direct access to cortical brain cells. *Neuroscience Letters*, **1993**, 163, 41-4	3.3	77
400	Isolation of peptide transport system-6 from brain endothelial cells: therapeutic effects with antisense inhibition in Alzheimer and stroke models. *Journal of Cerebral Blood Flow and Metabolism*, **2009**, 29, 411-22	7.3	76
399	Loss of appendicular muscle mass and loss of muscle strength in young postmenopausal women. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2007**, 62, 330-5	6.4	76
398	Role of the Blood-Brain Barrier in Central Nervous System Insulin Resistance. *Frontiers in Neuroscience*, **2019**, 13, 521	5.1	75
397	Lipids and cognition. *Journal of Alzheimeris Disease*, **2010**, 20, 737-47	4.3	75
396	The blood-brain barrier: connecting the gut and the brain. *Regulatory Peptides*, **2008**, 149, 11-4		73
395	Interleukin-2 does not cross the blood-brain barrier by a saturable transport system. *Brain Research Bulletin*, **1994**, 34, 103-9	3.9	73
394	Adiponectin does not cross the blood-brain barrier but modifies cytokine expression of brain endothelial cells. *Diabetes*, **2006**, 55, 141-7	0.9	72

393	A physiological role for amyloid-beta protein:enhancement of learning and memory. *Journal of Alzheimeris Disease*, **2010**, 19, 441-9	4.3	71
392	Inflammation-induced dysfunction of the low-density lipoprotein receptor-related protein-1 at the blood-brain barrier: protection by the antioxidant N-acetylcysteine. *Brain, Behavior, and Immunity*, **2012**, 26, 1085-94	16.6	70
391	Opposite direction of transport across the blood-brain barrier for Tyr-MIF-1 and MIF-1: comparison with morphine. *Peptides*, **1994**, 15, 23-9	3.8	70
390	Lipid peroxidation in brain during aging in the senescence-accelerated mouse (SAM). *Neurobiology of Aging*, **2007**, 28, 1170-8	5.6	69
389	Polypeptide point modifications with fatty acid and amphiphilic block copolymers for enhanced brain delivery. *Bioconjugate Chemistry*, **2005**, 16, 793-802	6.3	69
388	Adsorptive endocytosis of HIV-1gp120 by blood-brain barrier is enhanced by lipopolysaccharide. *Experimental Neurology*, **1999**, 156, 165-71	5.7	69
387	Effect of dietary n-3 polyunsaturated fatty acids on brain lipid fatty acid composition, learning ability, and memory of senescence-accelerated mouse. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2008**, 63, 1153-60	6.4	68
386	HIV-1 protein gp120 crosses the blood-brain barrier: role of adsorptive endocytosis. *Life Sciences*, **1997**, 61, PL119-25	6.8	67
385	The effects of high fat diets on the blood-brain barrier transport of leptin: failure or adaptation?. *Physiology and Behavior*, **2006**, 88, 244-8	3.5	67
384	The blood-brain barrier as a regulatory interface in the gut-brain axes. *Physiology and Behavior*, **2006**, 89, 472-6	3.5	67
383	Mannose 6-phosphate receptor-mediated transport of sulfamidase across the blood-brain barrier in the newborn mouse. *Molecular Therapy*, **2008**, 16, 1261-6	11.7	66
382	Highly active antiretroviral therapy drug combination induces oxidative stress and mitochondrial dysfunction in immortalized human blood-brain barrier endothelial cells. *Free Radical Biology and Medicine*, **2011**, 50, 801-10	7.8	64
381	Leucine competes with kynurenine for blood-to-brain transport and prevents lipopolysaccharide-induced depression-like behavior in mice. *Molecular Psychiatry*, **2019**, 24, 1523-1532	15.1	63
380	Testosterone modulates gene expression pathways regulating nutrient accumulation, glucose metabolism and protein turnover in mouse skeletal muscle. *Journal of Developmental and Physical Disabilities*, **2011**, 34, 55-68		63
379	Primary adrenal hyperplasia: a new subset of primary hyperaldosteronism. *Journal of Clinical Endocrinology and Metabolism*, **1984**, 58, 783-5	5.6	63
378	Are the extracellular [correction of extracelluar] pathways a conduit for the delivery of therapeutics to the brain?. *Current Pharmaceutical Design*, **2004**, 10, 1365-70	3.3	63
377	Passage of vasoactive intestinal peptide across the blood-brain barrier. *Peptides*, **2003**, 24, 437-44	3.8	62
376	Regional transport of TNF-alpha across the blood-brain barrier in young ICR and young and aged SAMP8 mice. *Neurobiology of Aging*, **2001**, 22, 671-6	5.6	62

375	Age-Associated Changes in the Immune System and Blood?Brain Barrier Functions. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	61
374	High glucose-induced mitochondrial respiration and reactive oxygen species in mouse cerebral pericytes is reversed by pharmacological inhibition of mitochondrial carbonic anhydrases: Implications for cerebral microvascular disease in diabetes. *Biochemical and Biophysical Research Communications*, **2013**, 440, 354-8	3.4	61
373	Transport across the blood-brain barrier of pluronic leptin. *Journal of Pharmacology and Experimental Therapeutics*, **2010**, 333, 253-63	4.7	61
372	Transport of pituitary adenylate cyclase-activating polypeptide across the blood-brain barrier and the prevention of ischemia-induced death of hippocampal neurons. *Annals of the New York Academy of Sciences*, **1996**, 805, 270-7; discussion 277-9	6.5	61
371	Rapid transport of CCL11 across the blood-brain barrier: regional variation and importance of blood cells. *Journal of Pharmacology and Experimental Therapeutics*, **2014**, 349, 497-507	4.7	60
370	Conjugates of superoxide dismutase 1 with amphiphilic poly(2-oxazoline) block copolymers for enhanced brain delivery: synthesis, characterization and evaluation in vitro and in vivo. *Molecular Pharmaceutics*, **2013**, 10, 360-77	5.6	60
369	Estradiol potentiates acetylcholine and glutamate-mediated post-trial memory processing in the hippocampus. *Brain Research*, **2000**, 864, 263-9	3.7	60
368	Evidence that [125I]N-Tyr-delta sleep-inducing peptide crosses the blood-brain barrier by a non-competitive mechanism. *Brain Research*, **1984**, 301, 201-7	3.7	60
367	Peptides and the blood-brain barrier. *Peptides*, **2015**, 72, 16-9	3.8	59
366	Proteomic identification of less oxidized brain proteins in aged senescence-accelerated mice following administration of antisense oligonucleotide directed at the Abeta region of amyloid precursor protein. *Molecular Brain Research*, **2005**, 138, 8-16		58
365	The blood-brain barrier in psychoneuroimmunology. *Neurologic Clinics*, **2006**, 24, 413-9	4.5	58
364	Aluminum alters the permeability of the blood-brain barrier to some non-peptides. *Neuropharmacology*, **1985**, 24, 407-12	5.5	58
363	Ischemia-reperfusion impairs blood-brain barrier function and alters tight junction protein expression in the ovine fetus. *Neuroscience*, **2012**, 226, 89-100	3.9	57
362	Blood-Brain Barrier Disruption and Neurovascular Unit Dysfunction in Diabetic Mice: Protection with the Mitochondrial Carbonic Anhydrase Inhibitor Topiramate. *Journal of Pharmacology and Experimental Therapeutics*, **2016**, 359, 452-459	4.7	57
361	Blood-Brain Barriers in Obesity. *AAPS Journal*, **2017**, 19, 921-930	3.7	56
360	Uptake and degradation of blood-borne insulin by the olfactory bulb. *Peptides*, **1999**, 20, 373-8	3.8	56
359	Tyr-MIF-1 and Met-enkephalin share a saturable blood-brain barrier transport system. *Peptides*, **1987**, 8, 899-903	3.8	56
358	Intranasal administration of PACAP: uptake by brain and regional brain targeting with cyclodextrins. *Peptides*, **2012**, 36, 168-75	3.8	55

357	Serum leptin levels as a marker for a syndrome X-like condition in wild baboons. *Journal of Clinical Endocrinology and Metabolism*, **2003**, 88, 1234-40	5.6	55
356	Cynical hostility, depressive symptoms, and the expression of inflammatory risk markers for coronary heart disease. *Journal of Behavioral Medicine*, **2003**, 26, 501-15	3.6	55
355	Differential transport of a secretin analog across the blood-brain and blood-cerebrospinal fluid barriers of the mouse. *Journal of Pharmacology and Experimental Therapeutics*, **2002**, 302, 1062-9	4.7	55
354	Role of the blood-brain barrier in the evolution of feeding and cognition. *Annals of the New York Academy of Sciences*, **2012**, 1264, 13-9	6.5	54
353	Effect of alpha-lipoic acid on memory, oxidation, and lifespan in SAMP8 mice. *Journal of Alzheimeris Disease*, **2012**, 32, 447-55	4.3	54
352	Dietary components in the development of leptin resistance. *Advances in Nutrition*, **2013**, 4, 164-75	10	54
351	Nano-particle delivery of brain derived neurotrophic factor after focal cerebral ischemia reduces tissue injury and enhances behavioral recovery. *Pharmacology Biochemistry and Behavior*, **2016**, 150-151, 48-56	3.9	53
350	Prolactin transport into mouse brain is independent of prolactin receptor. *FASEB Journal*, **2016**, 30, 1002-10	6.9	53
349	Insulin transport across the blood-brain barrier can occur independently of the insulin receptor. *Journal of Physiology*, **2018**, 596, 4753-4765	3.9	53
348	Persistence of blood-to-brain transport of leptin in obese leptin-deficient and leptin receptor-deficient mice. *Brain Research*, **2000**, 873, 165-7	3.7	53
347	Central nervous system effects of peptides, 1980-1985: a cross-listing of peptides and their central actions from the first six years of the journal Peptides. *Peptides*, **1986**, 7, 497-537	3.8	53
346	Radioimmunoassay of DSIP-like material in human blood: possible protein binding. *Pharmacology Biochemistry and Behavior*, **1981**, 15, 969-74	3.9	53
345	Disruption of the hippocampal and hypothalamic blood-brain barrier in a diet-induced obese model of type II diabetes: prevention and treatment by the mitochondrial carbonic anhydrase inhibitor, topiramate. *Fluids and Barriers of the CNS*, **2019**, 16, 1	7	53
344	The blood-brain barrier as an endocrine tissue. *Nature Reviews Endocrinology*, **2019**, 15, 444-455	15.2	52
343	Lipopolysaccharide impairs blood-brain barrier P-glycoprotein function in mice through prostaglandin- and nitric oxide-independent pathways. *Journal of NeuroImmune Pharmacology*, **2009**, 4, 276-82	6.9	52
342	Anorectic effects of circulating cytokines: role of the vascular blood-brain barrier. *Nutrition*, **2001**, 17, 434-7	4.8	52
341	Neurovascular unit crosstalk: Pericytes and astrocytes modify cytokine secretion patterns of brain endothelial cells. *Journal of Cerebral Blood Flow and Metabolism*, **2018**, 38, 1104-1118	7.3	52
340	Brain pericytes increase the lipopolysaccharide-enhanced transcytosis of HIV-1 free virus across the in vitro blood-brain barrier: evidence for cytokine-mediated pericyte-endothelial cell crosstalk. *Fluids and Barriers of the CNS*, **2013**, 10, 23	7	51

339	HIV-1-induced production of endothelin-1 in an in vitro model of the human blood-brain barrier. *NeuroReport*, **2002**, 13, 1179-83	1.7	51
338	D-[Ala1]-peptide T-amide is transported from blood to brain by a saturable system. *Brain Research Bulletin*, **1987**, 19, 629-33	3.9	51
337	Intranasal administration as a route for drug delivery to the brain: evidence for a unique pathway for albumin. *Journal of Pharmacology and Experimental Therapeutics*, **2014**, 351, 54-60	4.7	50
336	Alzheimer's disease through the eye of a mouse. Acceptance lecture for the 2001 Gayle A. Olson and Richard D. Olson prize. *Peptides*, **2002**, 23, 589-99	3.8	50
335	Quantifying carrier-mediated transport of peptides from the brain to the blood. *Methods in Enzymology*, **1989**, 168, 652-60	1.7	50
334	Blast exposure causes dynamic microglial/macrophage responses and microdomains of brain microvessel dysfunction. *Neuroscience*, **2016**, 319, 206-20	3.9	49
333	Delivery of peptides to the brain: emphasis on therapeutic development. *Biopolymers*, **2008**, 90, 589-94	2.2	49
332	Blood-brain barrier and energy balance. *Obesity*, **2006**, 14 Suppl 5, 234S-237S	8	49
331	Permeability of the blood-brain barrier to peptides: an approach to the development of therapeutically useful analogs. *Peptides*, **1992**, 13, 1289-94	3.8	49
330	The putative blood-brain barrier transporter for the beta-amyloid binding protein apolipoprotein j is saturated at physiological concentrations. *Life Sciences*, **1997**, 60, PL115-8	6.8	48
329	Strategies for the delivery of leptin to the CNS. *Journal of Drug Targeting*, **2002**, 10, 297-308	5.4	48
328	The interleukins-1 alpha, -1 beta, and -2 do not acutely disrupt the murine blood-brain barrier. *International Journal of Immunopharmacology*, **1992**, 14, 629-36		48
327	Science, citation, and funding. *Science*, **1991**, 251, 1410-1	33.3	48
326	Potentiation of lead-induced cell death in PC12 cells by glutamate: protection by N-acetylcysteine amide (NACA), a novel thiol antioxidant. *Toxicology and Applied Pharmacology*, **2006**, 216, 197-205	4.6	47
325	Delivering peptides to the central nervous system: dilemmas and strategies. *Pharmaceutical Research*, **1991**, 8, 1345-50	4.5	47
324	Anti-IL-6 neutralizing antibody modulates blood-brain barrier function in the ovine fetus. *FASEB Journal*, **2015**, 29, 1739-53	0.9	46
323	Peripheral administration of antisense oligonucleotides targeting the amyloid-β protein precursor reverses Aβ PP and LRP-1 overexpression in the aged SAMP8 mouse brain. *Journal of Alzheimeris Disease*, **2012**, 28, 951-60	4.3	46
322	Lipopolysaccharide-enhanced transcellular transport of HIV-1 across the blood-brain barrier is mediated by luminal microvessel IL-6 and GM-CSF. *Journal of Neuroinflammation*, **2011**, 8, 167	10.1	45

321	Relative contributions of peripheral and central sources to levels of IL-1 alpha in the cerebral cortex of mice: assessment with species-specific enzyme immunoassays. *Journal of Neuroimmunology*, **1997**, 79, 22-8	3.5	45
320	Epinephrine enhances lysosomal enzyme delivery across the blood brain barrier by up-regulation of the mannose 6-phosphate receptor. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 12873-8	11.5	45
319	Orexin-A-induced feeding is dependent on nitric oxide. *Peptides*, **2005**, 26, 759-65	3.8	45
318	Delta sleep-inducing peptide crosses the blood-brain-barrier in dogs: some correlations with protein binding. *Pharmacology Biochemistry and Behavior*, **1982**, 17, 1009-14	3.9	45
317	Delivery of testosterone to the brain by intranasal administration: comparison to intravenous testosterone. *Journal of Drug Targeting*, **2009**, 17, 91-7	5.4	44
316	Nitric oxide isoenzymes regulate lipopolysaccharide-enhanced insulin transport across the blood-brain barrier. *Endocrinology*, **2008**, 149, 1514-23	4.8	44
315	Permeability of the mouse blood-brain barrier to murine interleukin-2: predominance of a saturable efflux system. *Brain, Behavior, and Immunity*, **2004**, 18, 434-42	16.6	44
314	Misleading concepts in the field of brain peptides. *Peptides*, **1984**, 5 Suppl 1, 249-53	3.8	44
313	Protein conjugation with amphiphilic block copolymers for enhanced cellular delivery. *Bioconjugate Chemistry*, **2008**, 19, 1071-7	6.3	43
312	Effects of lipopolysaccharide on leptin transport across the blood-brain barrier. *Brain Research*, **2004**, 1016, 58-65	3.7	43
311	Regional variation in transport of pancreatic polypeptide across the blood-brain barrier of mice. *Pharmacology Biochemistry and Behavior*, **1995**, 51, 139-47	3.9	43
310	Selective transport of blood-borne interleukin-1 alpha into the posterior division of the septum of the mouse brain. *Brain Research*, **1995**, 700, 83-8	3.7	43
309	Permeability of the blood-brain barrier to melanocortins. *Peptides*, **1995**, 16, 1157-61	3.8	43
308	The opiate system in invertebrates. *Peptides*, **1994**, 15, 1309-29	3.8	43
307	Physiological consequences of the passage of peptides across the blood-brain barrier. *Reviews in the Neurosciences*, **1993**, 4, 365-72	4.7	42
306	Evidence for a cholecystokinin gut-brain axis with modulation by bombesin. *Peptides*, **1980**, 1, 347-51	3.8	42
305	Ovine proinflammatory cytokines cross the murine blood-brain barrier by a common saturable transport mechanism. *NeuroImmunoModulation*, **2010**, 17, 405-10	2.5	41
304	Blood-brain barrier as a regulatory interface. *Forum of Nutrition*, **2010**, 63, 102-110		41

303	Chronic ethanol consumption impairs learning and memory after cessation of ethanol. *Alcoholism: Clinical and Experimental Research*, **2005**, 29, 971-82	3.7	41
302	Regional differences in PACAP transport across the blood-brain barrier in mice: a possible influence of strain, amyloid beta protein, and age. *Peptides*, **2002**, 23, 2197-202	3.8	41
301	Transport, uptake, and metabolism of blood-borne vasopressin by the blood-brain barrier. *Brain Research*, **1992**, 590, 213-8	3.7	41
300	Aging and the blood-brain barrier: changes in the carrier-mediated transport of peptides in rats. *Neuroscience Letters*, **1985**, 61, 171-5	3.3	41
299	Nitric oxide is a central component in neuropeptide regulation of appetite. *Peptides*, **2011**, 32, 776-80	3.8	40
298	Higher C-reactive protein and soluble tumor necrosis factor receptor levels are associated with poor physical function and disability: a cross-sectional analysis of a cohort of late middle-aged African Americans. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2010**, 65, 274-81	6.4	40
297	Diurnal uptake of circulating interleukin-1alpha by brain, spinal cord, testis and muscle. *NeuroImmunoModulation*, **1998**, 5, 36-41	2.5	40
296	Nanoformulation of Brain-Derived Neurotrophic Factor with Target Receptor-Triggered-Release in the Central Nervous System. *Advanced Functional Materials*, **2018**, 28, 1703982	15.6	40
295	Characterization of lectin-mediated brain uptake of HIV-1 GP120. *Journal of Neuroscience Research*, **1998**, 54, 522-9	4.4	39
294	Copper complexing decreases the ability of amyloid beta peptide to cross the BBB and enter brain parenchyma. *Peptides*, **2007**, 28, 1424-32	3.8	39
293	Reversible association of the cytokines MIP-1 alpha and MIP-1 beta with the endothelia of the blood-brain barrier. *Neuroscience Letters*, **1996**, 205, 202-6	3.3	39
292	Ghrelin transport across the blood-brain barrier can occur independently of the growth hormone secretagogue receptor. *Molecular Metabolism*, **2018**, 18, 88-96	8.8	39
291	Serum leptin levels in wild and captive populations of baboons (papio): implications for the ancestral role of leptin. *Journal of Clinical Endocrinology and Metabolism*, **2001**, 86, 4315-20	5.6	38
290	Permanent and temporary inactivation of the hippocampus impairs T-maze footshock avoidance acquisition and retention. *Brain Research*, **2000**, 872, 242-9	3.7	38
289	Differential penetration of DSIP peptides into rat brain. *Pharmacology Biochemistry and Behavior*, **1982**, 17, 1187-91	3.9	38
288	Central and peripheral administration of antisense oligonucleotide targeting amyloid-protein precursor improves learning and memory and reduces neuroinflammatory cytokines in Tg2576 (APPswe) mice. *Journal of Alzheimeris Disease*, **2014**, 40, 1005-16	4.3	37
287	Molecular hydrogen in drinking water protects against neurodegenerative changes induced by traumatic brain injury. *PLoS ONE*, **2014**, 9, e108034	3.7	37
286	Pharmacological inhibition of mitochondrial carbonic anhydrases protects mouse cerebral pericytes from high glucose-induced oxidative stress and apoptosis. *Journal of Pharmacology and Experimental Therapeutics*, **2013**, 344, 637-45	4.7	37

285	Sequestration of centrally administered insulin by the brain: effects of starvation, aluminum, and TNF-alpha. *Hormones and Behavior*, **1996**, 30, 280-6	3.7	37
284	The extracellular matrix of the blood-brain barrier: structural and functional roles in health, aging, and Alzheimer's disease. *Tissue Barriers*, **2019**, 7, 1651157	4.3	36
283	Antagonists of growth hormone-releasing hormone cross the blood-brain barrier: a potential applicability to treatment of brain tumors. *Proceedings of the National Academy of Sciences of the United States of America*, **2005**, 102, 12495-500	11.5	36
282	Endogenous peptide Tyr-Pro-Trp-Gly-NH2 (Tyr-W-MIF-1) is transported from the brain to the blood by peptide transport system-1. *Journal of Neuroscience Research*, **1993**, 35, 690-5	4.4	36
281	Effects of a growth hormone-releasing hormone antagonist on telomerase activity, oxidative stress, longevity, and aging in mice. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 22272-7	11.5	35
280	Increase in presenilin 1 (PS1) levels in senescence-accelerated mice (SAMP8) may indirectly impair memory by affecting amyloid precursor protein (APP) processing. *Journal of Experimental Biology*, **2009**, 212, 494-8	3	35
279	Carrier-mediated transport of labeled oxytocin from brain to blood. *Neuroendocrinology*, **1991**, 53, 447-52	3.6	35
278	Minireview. Brain peptides: the dangers of constricted nomenclatures. *Life Sciences*, **1983**, 32, 295-301	6.8	35
277	Human immunodeficiency virus-1 uses the mannose-6-phosphate receptor to cross the blood-brain barrier. *PLoS ONE*, **2012**, 7, e39565	3.7	35
276	Neutralizing anti-interleukin-1 antibodies modulate fetal blood-brain barrier function after ischemia. *Neurobiology of Disease*, **2015**, 73, 118-29	7.5	34
275	The APOE genotype: modification of therapeutic responses in Alzheimer's disease. *Current Pharmaceutical Design*, **2015**, 21, 114-20	3.3	34
274	Lower serum DHEAS levels are associated with a higher degree of physical disability and depressive symptoms in middle-aged to older African American women. *Maturitas*, **2007**, 57, 347-60	5	34
273	Inhibition of the brain to blood transport system for enkephalins and Tyr-MIF-1 in mice addicted or genetically predisposed to drinking ethanol. *Alcohol*, **1989**, 6, 53-7	2.7	34
272	Stereospecific transport of Tyr-MIF-1 across the blood-brain barrier by peptide transport system-1. *Brain Research Bulletin*, **1990**, 25, 589-92	3.9	34
271	Blast exposure elicits blood-brain barrier disruption and repair mediated by tight junction integrity and nitric oxide dependent processes. *Scientific Reports*, **2018**, 8, 11344	4.9	33
270	Brain distribution and behavioral effects of progesterone and pregnenolone after intranasal or intravenous administration. *European Journal of Pharmacology*, **2010**, 641, 128-34	5.3	33
269	Lipopolysaccharide-enhanced transcellular transport of HIV-1 across the blood-brain barrier is mediated by the p38 mitogen-activated protein kinase pathway. *Experimental Neurology*, **2008**, 210, 740-9	5.7	33
268	Effect of lipopolysaccharide on the transport of pituitary adenylate cyclase activating polypeptide across the blood-brain barrier. *Experimental Neurology*, **2005**, 191, 137-44	5.7	33

267	DHEAS improves learning and memory in aged SAMP8 mice but not in diabetic mice. *Life Sciences*, **2004**, 75, 2775-85	6.8	33
266	Effects of Lead and Cadmium on Brain Endothelial Cell Survival, Monolayer Permeability, and Crucial Oxidative Stress Markers in an in Vitro Model of the Blood-Brain Barrier. *Toxics*, **2014**, 2, 258-275	4.7	32
265	Developing drugs that can cross the blood-brain barrier: applications to Alzheimer's disease. *BMC Neuroscience*, **2008**, 9 Suppl 3, S2	3.2	32
264	Regional variations in the transport of interleukin-1alpha across the blood-brain barrier in ICR and aging SAMP8 mice. *NeuroImmunoModulation*, **2000**, 8, 165-70	2.5	32
263	Periventricular penetration and disappearance of ICV Tyr-MIF-1, DAMGO, tyrosine, and albumin. *Peptides*, **1996**, 17, 247-50	3.8	32
262	Entry of DSIP peptides into dog CSF: role of physicochemical and pharmacokinetic parameters. *Brain Research Bulletin*, **1986**, 17, 155-8	3.9	32
261	Pluronic modified leptin with increased systemic circulation, brain uptake and efficacy for treatment of obesity. *Journal of Controlled Release*, **2014**, 191, 34-46	11.7	31
260	EEG evidence that morphine and an enkephalin analog cross the blood-brain barrier. *Pharmacology Biochemistry and Behavior*, **1991**, 40, 771-4	3.9	31
259	Interleukin-1□transfer across the blood-brain barrier in the ovine fetus. *Journal of Cerebral Blood Flow and Metabolism*, **2015**, 35, 1388-95	7.3	30
258	Interactions of SARS-CoV-2 with the Blood-Brain Barrier. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	30
257	Differential transport of rat and human interleukin-1alpha across the blood-brain barrier and blood-testis barrier in rats. *Brain Research*, **2000**, 881, 57-61	3.7	29
256	Effect of spinal cord injury on the permeability of the blood-brain and blood-spinal cord barriers to the neurotropin PACAP. *Experimental Neurology*, **1998**, 151, 116-23	5.7	29
255	Transmission routes of HIV-1 gp120 from brain to lymphoid tissues. *Brain Research*, **1999**, 822, 26-33	3.7	29
254	Saturable efflux of the peptides RC-160 and Tyr-MIF-1 by different parts of the blood-brain barrier. *Brain Research Bulletin*, **1994**, 35, 179-82	3.9	29
253	Bidirectional passage of peptides across the blood-brain barrier. *Progress in Brain Research*, **1992**, 91, 139-48	2.9	29
252	A decade of changing perceptions about neuropeptides. *Annals of the New York Academy of Sciences*, **1990**, 579, 1-7	6.5	29
251	Healthy aging and the blood-brain barrier. *Nature Aging*, **2021**, 1, 243-254		29
250	The CNS as a target for peptides and peptide-based drugs. *Expert Opinion on Drug Delivery*, **2006**, 3, 707-32		28

249	Leptin and adiponectin levels in middle-aged postmenopausal women: associations with lifestyle habits, hormones, and inflammatory markers--a cross-sectional study. *Metabolism: Clinical and Experimental*, **2006**, 55, 1630-6	12.7	28
248	Binding, internalization, and membrane incorporation of human immunodeficiency virus-1 at the blood-brain barrier is differentially regulated. *Neuroscience*, **2004**, 128, 143-53	3.9	28
247	Permeability of the blood-brain barrier to the neurotensin8-13 analog NT1. *Brain Research*, **1995**, 695, 59-63	3.7	28
246	Interactions between the blood-brain barrier and endogenous peptides: emerging clinical implications. *American Journal of the Medical Sciences*, **1988**, 295, 459-65	2.2	28
245	Insulin resistance, dyslipidemia, and apolipoprotein E interactions as mechanisms in cognitive impairment and Alzheimer's disease. *Experimental Biology and Medicine*, **2016**, 241, 1676-83	3.7	27
244	Somatostatin receptor subtype-4 agonist NNC 26-9100 decreases extracellular and intracellular A□1trimers. *European Journal of Pharmacology*, **2012**, 683, 116-24	5.3	27
243	Impairments in brain-to-blood transport of amyloid-□and reabsorption of cerebrospinal fluid in an animal model of Alzheimer's disease are reversed by antisense directed against amyloid-□protein precursor. *Journal of Alzheimeris Disease*, **2011**, 23, 599-605	4.3	27
242	Passage of leptin across the blood-testis barrier. *American Journal of Physiology - Endocrinology and Metabolism*, **1999**, 276, E1099-104	6	27
241	The aluminum-induced increase in blood-brain barrier permeability to delta-sleep-inducing peptide occurs throughout the brain and is independent of phosphorus and acetylcholinesterase levels. *Psychopharmacology*, **1985**, 86, 84-9	4.7	27
240	Insulin resistance syndrome in the elderly: assessment of functional, biochemical, metabolic, and inflammatory status. *Diabetes Care*, **2007**, 30, 2369-73	14.6	26
239	Alveolar macrophage apoptosis and TNF-alpha, but not p53, expression correlate with murine response to bleomycin. *American Journal of Physiology - Lung Cellular and Molecular Physiology*, **1998**, 275, L1208-18	5.8	26
238	Modulation of immunoactive levels of DSIP and blood-brain permeability by lighting and diurnal rhythm. *Journal of Neuroscience Research*, **1985**, 14, 347-55	4.4	26
237	In vitro modeling of blood-brain barrier and interface functions in neuroimmune communication. *Fluids and Barriers of the CNS*, **2020**, 17, 26	7	25
236	Tau Proteins Cross the Blood-Brain Barrier. *Journal of Alzheimeris Disease*, **2017**, 55, 411-419	4.3	25
235	Disruption of the integrity and function of brain microvascular endothelial cells in culture by exposure to diesel engine exhaust particles. *Toxicology Letters*, **2013**, 220, 1-7	4.4	25
234	Soluble interleukin-6 receptor induces motor stereotypies and co-localizes with gp130 in regions linked to cortico-striato-thalamo-cortical circuits. *PLoS ONE*, **2012**, 7, e41623	3.7	25
233	Antibody to beta-amyloid protein increases acetylcholine in the hippocampus of 12 month SAMP8 male mice. *Life Sciences*, **2003**, 73, 555-62	6.8	25
232	Passage of murine scrapie prion protein across the mouse vascular blood-brain barrier. *Biochemical and Biophysical Research Communications*, **2004**, 318, 125-30	3.4	25

231	Lipophilic Hexadentate Aluminum Complexes of New Phenolate-Derivatized Cyclohexanetriamine Ligands and Their Effect on the Peptide Transport System (PTS-1). *Inorganic Chemistry*, **1995**, 34, 2143-2152	5.1	25
230	Lipophilic hexadentate gallium, indium and iron complexes of new phenolate-derivatized cyclohexanetriamines as potential in vivo metal-transfer reagents. *Journal of the Chemical Society Dalton Transactions*, **1995**, 1677-1688		25
229	Effect of neurotransmitters on the system that transports Tyr-MIF-1 and the enkephalins across the blood-brain barrier: a dominant role for serotonin. *Psychopharmacology*, **1989**, 98, 380-5	4.7	25
228	Passage of Tyr-MIF-1 from blood to brain. *Brain Research Bulletin*, **1989**, 23, 439-42	3.9	25
227	Delivery of therapeutic peptides and proteins to the CNS. *Advances in Pharmacology*, **2014**, 71, 277-99	5.7	24
226	Passage through the Ocular Barriers and Beneficial Effects in Retinal Ischemia of Topical Application of PACAP1-38 in Rodents. *International Journal of Molecular Sciences*, **2017**, 18,	6.3	24
225	Principles of strategic drug delivery to the brain (SDDB): development of anorectic and orexigenic analogs of leptin. *Physiology and Behavior*, **2011**, 105, 145-9	3.5	24
224	Permeability of the blood-brain barrier to a rhenacarborane. *Journal of Pharmacology and Experimental Therapeutics*, **2009**, 329, 608-14	4.7	24
223	Positron emission tomography shows that intrathecal leptin reaches the hypothalamus in baboons. *Journal of Pharmacology and Experimental Therapeutics*, **2002**, 301, 878-83	4.7	24
222	Obesity-inducing lesions of the central nervous system alter leptin uptake by the blood-brain barrier. *Life Sciences*, **2001**, 69, 2765-73	6.8	24
221	Mediation of serotonin-induced analgesia by the 5HT2 receptor in the pentobarbital anesthetized mouse model. *Brain Research Bulletin*, **1988**, 21, 887-91	3.9	24
220	Delta sleep-inducing peptide (DSIP)-like material is absorbed by the gastrointestinal tract of the neonatal rat. *Life Sciences*, **1983**, 33, 1587-97	6.8	24
219	Ocular Delivery of PACAP1-27 Protects the Retina From Ischemic Damage in Rodents **2016**, 57, 6683-6691		24
218	Somatostatin receptor subtype-4 agonist NNC 26-9100 mitigates the effect of soluble A(1-42) oligomers via a metalloproteinase-dependent mechanism. *Brain Research*, **2013**, 1520, 145-56	3.7	23
217	Susceptibility of juvenile and adult blood-brain barrier to endothelin-1: regulation of P-glycoprotein and breast cancer resistance protein expression and transport activity. *Journal of Neuroinflammation*, **2012**, 9, 273	10.1	23
216	The effect of cardiac arrest on the permeability of the mouse blood-brain and blood-spinal cord barrier to pituitary adenylate cyclase activating polypeptide (PACAP). *Peptides*, **1999**, 20, 1337-40	3.8	23
215	CSF-plasma relationships for DSIP and some other neuropeptides. *Pharmacology Biochemistry and Behavior*, **1983**, 19, 1037-40	3.9	23
214	Tauopathies - Focus on Changes at the Neurovascular Unit. *Current Alzheimer Research*, **2017**, 14, 790-803		22

213	Effects of a behaviorally active antibody on the brain uptake and clearance of amyloid beta proteins. *Peptides*, **2005**, 26, 287-94	3.8	22
212	Transport of thyroxine across the blood-brain barrier is directed primarily from brain to blood in the mouse. *Life Sciences*, **1985**, 37, 2407-14	6.8	22
211	Intranasal delivery of N-terminal modified leptin-pluronic conjugate for treatment of obesity. *Journal of Controlled Release*, **2017**, 263, 172-184	11.7	21
210	Sleep fragmentation and sepsis differentially impact blood-brain barrier integrity and transport of tumor necrosis factor-□n aging. *Brain, Behavior, and Immunity*, **2015**, 50, 259-265	16.6	21
209	Cognitive benefits of lithium chloride in APP/PS1 mice are associated with enhanced brain clearance of □amyloid. *Brain, Behavior, and Immunity*, **2018**, 70, 36-47	16.6	21
208	SAMP8 mice have altered hippocampal gene expression in long term potentiation, phosphatidylinositol signaling, and endocytosis pathways. *Neurobiology of Aging*, **2014**, 35, 159-68	5.6	21
207	Pharmacokinetics and modeling of immune cell trafficking: quantifying differential influences of target tissues versus lymphocytes in SJL and lipopolysaccharide-treated mice. *Journal of Neuroinflammation*, **2012**, 9, 231	10.1	21
206	Insulin detemir is not transported across the blood-brain barrier. *Peptides*, **2010**, 31, 2284-8	3.8	21
205	Nitrative stress in cerebral endothelium is mediated by mGluR5 in hyperhomocysteinemia. *Journal of Cerebral Blood Flow and Metabolism*, **2012**, 32, 825-34	7.3	21
204	The role of the blood-brain barrier transporter PTS-1 in regulating concentrations of methionine enkephalin in blood and brain. *Alcohol*, **1997**, 14, 237-45	2.7	21
203	Aluminum-sensitive degradation of amyloid beta-protein 1-40 by murine and human intracellular enzymes. *Neurotoxicology and Teratology*, **1996**, 18, 671-7	3.9	21
202	Lack of saturable transport across the blood-brain barrier in either direction for beta-amyloid1-28 (Alzheimer's disease protein). *Brain Research Bulletin*, **1991**, 27, 819-23	3.9	21
201	Serum amyloid A: an ozone-induced circulating factor with potentially important functions in the lung-brain axis. *FASEB Journal*, **2017**, 31, 3950-3965	0.9	20
200	ApoE and cerebral insulin: Trafficking, receptors, and resistance. *Neurobiology of Disease*, **2020**, 137, 104755	7.5	20
199	Role of OATP transporters in steroid uptake by prostate cancer cells in vivo. *Prostate Cancer and Prostatic Diseases*, **2017**, 20, 20-27	6.2	20
198	Nitric oxide activity and isoenzyme expression in the senescence-accelerated mouse p8 model of Alzheimer's disease: effects of anti-amyloid antibody and antisense treatments. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2009**, 64, 1025-30	6.4	20
197	Granulocyte macrophage-colony stimulating factor crosses the blood-testis barrier in mice. *Biology of Reproduction*, **1997**, 57, 822-6	3.9	20
196	Enkephalin, PPE mRNA, and PTS-1 in alcohol withdrawal seizure-prone and -resistant mice. *Alcohol*, **1998**, 15, 25-31	2.7	20

195	Brain uptake pharmacokinetics of incretin receptor agonists showing promise as Alzheimer's and Parkinson's disease therapeutics. *Biochemical Pharmacology*, **2020**, 180, 114187	6	20
194	Genetics and sex influence peripheral and central innate immune responses and blood-brain barrier integrity. *PLoS ONE*, **2018**, 13, e0205769	3.7	20
193	Multiple lipopolysaccharide (LPS) injections alter interleukin 6 (IL-6), IL-7, IL-10 and IL-6 and IL-7 receptor mRNA in CNS and spleen. *Neuroscience*, **2017**, 355, 9-21	3.9	19
192	Chronic peripheral administration of somatostatin receptor subtype-4 agonist NNC 26-9100 enhances learning and memory in SAMP8 mice. *European Journal of Pharmacology*, **2011**, 654, 53-9	5.3	19
191	The blood-brain barrier in psychoneuroimmunology. *Immunology and Allergy Clinics of North America*, **2009**, 29, 223-8	3.3	19
190	Do objective measurements of physical function in ambulatory nursing home women improve assessment of functional status?. *Journal of the American Medical Directors Association*, **2007**, 8, 469-76	5.9	19
189	Peptide transport system-1 (PTS-1) for Tyr-MIF-1 and Met-enkephalin differs from the receptors for either. *Brain Research*, **1999**, 839, 336-40	3.7	19
188	Differential metabolism of Tyr-MIF-1 and MIF-1 in rat and human plasma. *Biochemical Pharmacology* , **1994**, 47, 699-709	6	19
187	Extreme stability of Tyr-MIF-1 in CSF. *Neuroscience Letters*, **1994**, 174, 26-8	3.3	19
186	Increased Hyaluronan and TSG-6 in Association with Neuropathologic Changes of Alzheimer's Disease. *Journal of Alzheimeris Disease*, **2019**, 67, 91-102	4.3	19
185	A pharmacologically active monoclonal antibody against the human melanocortin-4 receptor: effectiveness after peripheral and central administration. *Journal of Pharmacology and Experimental Therapeutics*, **2010**, 333, 478-90	4.7	18
184	Opiate modulation of IL-1alpha, IL-2, and TNF-alpha transport across the blood-brain barrier. *Brain, Behavior, and Immunity*, **2008**, 22, 1096-1102	16.6	18
183	The Blood-Brain Barrier Interface in Diabetes Mellitus: Dysfunctions, Mechanisms and Approaches to Treatment. *Current Pharmaceutical Design*, **2020**, 26, 1438-1447	3.3	18
182	Relative contributions of a CVO and the microvascular bed to delivery of blood-borne IL-1alpha to the brain. *American Journal of Physiology - Endocrinology and Metabolism*, **1998**, 275, E207-12	6	17
181	Perinatal treatment of rats with opiates affects the development of the blood-brain barrier transport system PTS-1. *Neurotoxicology and Teratology*, **1996**, 18, 711-5	3.9	17
180	Effects of neonatal treatment with Tyr-MIF-1, morphiceptin, and morphine on development, tail flick, and blood-brain barrier transport. *Developmental Brain Research*, **1993**, 75, 207-12		17
179	Measurement of Transport of Cytokines across the Blood-Brain Barrier. *Methods in Neurosciences*, **1993**, 67-77		17
178	The Effects of Normal Aging on Regional Accumulation of Hyaluronan and Chondroitin Sulfate Proteoglycans in the Mouse Brain. *Journal of Histochemistry and Cytochemistry*, **2018**, 66, 697-707	3.4	17

177	Exchange of peptides between the circulation and the nervous system: role of the blood-brain barrier. *Advances in Experimental Medicine and Biology*, **1990**, 274, 59-69	3.6	17
176	Small molecules as central nervous system therapeutics: old challenges, new directions, and a philosophic divide. *Future Medicinal Chemistry*, **2019**, 11, 489-493	4.1	16
175	A Spectrum of Topics for 2019: Advances in Neuroinflammation, Oxidative Stress, Obesity, Diabetes Mellitus, Cardiovascular Disease, Autism, Exosomes, and Central Nervous System Diseases. *Current Pharmaceutical Design*, **2020**, 26, 1-5	3.3	16
174	Andrographolide attenuates LPS-stimulated up-regulation of C-C and C-X-C motif chemokines in rodent cortex and primary astrocytes. *Journal of Neuroinflammation*, **2016**, 13, 34	10.1	16
173	Cardiorenal metabolic syndrome and diabetic cognopathy. *CardioRenal Medicine*, **2013**, 3, 265-82	2.8	16
172	Ethanol alters the concentration of Met-enkephalin in brain by affecting peptide transport system-1 independent of preproenkephalin mRNA. *Journal of Neuroscience Research*, **1997**, 48, 273-280	4.4	16
171	Development of Novel Therapeutics Targeting the Blood-Brain Barrier: From Barrier to Carrier. *Advanced Science*, **2021**, 8, e2101090	13.6	16
170	A Basic ApoE-Based Peptide Mediator to Deliver Proteins across the Blood-Brain Barrier: Long-Term Efficacy, Toxicity, and Mechanism. *Molecular Therapy*, **2017**, 25, 1531-1543	11.7	15
169	Antibody blood-brain barrier efflux is modulated by glycan modification. *Biochimica Et Biophysica Acta - General Subjects*, **2017**, 1861, 2228-2239	4	15
168	Alterations in Plasma microRNA and Protein Levels in War Veterans with Chronic Mild Traumatic Brain Injury. *Journal of Neurotrauma*, **2020**, 37, 1418-1430	5.4	15
167	Twenty-one hormones fail to inhibit the brain to blood transport system for Tyr-MIF-1 and the enkephalins in mice. *Journal of Pharmacy and Pharmacology*, **1988**, 40, 289-91	4.8	15
166	Preproenkephalin targeted antisenses cross the blood-brain barrier to reduce brain methionine enkephalin levels and increase voluntary ethanol drinking. *Peptides*, **2006**, 27, 784-96	3.8	15
165	Neuroimmune networks and communication pathways: the importance of location. *Brain, Behavior, and Immunity*, **2004**, 18, 120-2	16.6	15
164	Measurement of efflux rates from brain to blood. *Methods in Molecular Biology*, **1997**, 73, 353-60	1.4	15
163	Analgesia and the blood-brain barrier transport system for Tyr-MIF-1/enkephalins: evidence for a dissociation. *Neuropharmacology*, **1988**, 27, 175-9	5.5	15
162	Routes for the delivery of insulin to the central nervous system: A comparative review. *Experimental Neurology*, **2019**, 313, 10-15	5.7	15
161	Neutralizing anti-interleukin-1□antibodies reduce ischemia-related interleukin-1□transport across the blood-brain barrier in fetal sheep. *Neuroscience*, **2017**, 346, 113-125	3.9	14
160	Telmisartan prevents diet-induced obesity and preserves leptin transport across the blood-brain barrier in high-fat diet-fed mice. *Pflugers Archiv European Journal of Physiology*, **2018**, 470, 1673-1689	4.6	14

159	Intranasal Insulin Transport is Preserved in Aged SAMP8 Mice and is Altered by Albumin and Insulin Receptor Inhibition. *Journal of Alzheimeris Disease*, **2017**, 57, 241-252	4.3	14
158	Leucine modulates peptide transport system-1 across the blood-brain barrier at the stereospecific site within the central nervous system. *Journal of Pharmacy and Pharmacology*, **1991**, 43, 252-4	4.8	14
157	Internalization of the opioid growth factor, [Met5]-enkephalin, is dependent on clathrin-mediated endocytosis for downregulation of cell proliferation. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2010**, 299, R774-85	3.2	14
156	Mouse models of neurological disorders: a view from the blood-brain barrier. *Biochimica Et Biophysica Acta - Molecular Basis of Disease*, **2010**, 1802, 881-8	6.9	14
155	Passive diffusion of naltrexone into human and animal cells and upregulation of cell proliferation. *American Journal of Physiology - Regulatory Integrative and Comparative Physiology*, **2009**, 297, R844-52	3.2	14
154	Interactions of beta-amyloids with the blood-brain barrier. *Annals of the New York Academy of Sciences*, **1997**, 826, 190-9	6.5	14
153	Effects of wheatgerm agglutinin and aging on the regional brain uptake of HIV-1GP120. *Life Sciences*, **1999**, 65, 81-9	6.8	14
152	Possible therapeutic implications of the effects of some peptides on the brain. *Progress in Brain Research*, **1987**, 72, 223-34	2.9	14
151	Inter-alpha inhibitor proteins attenuate lipopolysaccharide-induced blood-brain barrier disruption and downregulate circulating interleukin 6 in mice. *Journal of Cerebral Blood Flow and Metabolism*, **2020**, 40, 1090-1102	7.3	14
150	Nitric oxide synthase mediates cerebellar dysfunction in mice exposed to repetitive blast-induced mild traumatic brain injury. *Scientific Reports*, **2020**, 10, 9420	4.9	13
149	Initial fate of prions upon peripheral infection: half-life, distribution, clearance, and tissue uptake. *FASEB Journal*, **2011**, 25, 2792-803	0.9	13
148	Denial versus dualism: the blood-brain barrier as an interface of the gut-brain axis. *Endocrinology*, **2006**, 147, 2609-10	4.8	13
147	Human immunodeficiency virus type 1 transport across the in vitro mouse brain endothelial cell monolayer. *Experimental Neurology*, **2005**, 193, 101-9	5.7	13
146	Mechanisms of HIV type 1-induced cognitive impairment: evidence for hippocampal cholinergic involvement with overstimulation of the VIPergic system by the viral coat protein core. *AIDS Research and Human Retroviruses*, **2002**, 18, 1189-95	1.6	13
145	Effect of cardiac arrest on brain weight and the permeability of the blood-brain and blood-spinal cord barrier to albumin and tumor necrosis factor-alpha. *Life Sciences*, **1999**, 65, 2127-34	6.8	13
144	Ionophore and Biometal Modulation of P-glycoprotein Expression and Function in Human Brain Microvascular Endothelial Cells. *Pharmaceutical Research*, **2018**, 35, 83	4.5	12
143	Resistance to the sympathoexcitatory effects of insulin and leptin in late pregnant rats. *Journal of Physiology*, **2019**, 597, 4087-4100	3.9	12
142	Antisense against Amyloid- Protein Precursor Reverses Memory Deficits and Alters Gene Expression in Neurotropic and Insulin-Signaling Pathways in SAMP8 Mice. *Journal of Alzheimeris Disease*, **2015**, 46, 535-48	4.3	12

141	Transport of CRH from mouse brain directly affects peripheral production of beta-endorphin by the spleen. *American Journal of Physiology - Endocrinology and Metabolism*, **1997**, 273, E1083-9	6	12
140	The SAMP8 mouse as a model for Alzheimer disease: studies from Saint Louis University. *International Congress Series*, **2004**, 1260, 23-28		12
139	Hypoxia and hypercarbia of chronic lung disease: minimal effects on anterior pituitary function. *Southern Medical Journal*, **1990**, 83, 290-3	0.6	12
138	Binding of Tyr-MIF-1 to isolated brain capillaries. *Brain Research Bulletin*, **1986**, 17, 829-31	3.9	12
137	Cytokines and the BloodBrain Barrier **2009**, 3-17		12
136	Association Between Alzheimer Dementia Mortality Rate and Altitude in California Counties. *JAMA Psychiatry*, **2015**, 72, 1253-4	14.5	11
135	NIH workshop report on the trans-agency blood-brain interface workshop 2016: exploring key challenges and opportunities associated with the blood, brain and their interface. *Fluids and Barriers of the CNS*, **2017**, 14, 12	7	11
134	Predictors of serum testosterone and DHEAS in African-American men. *Journal of Developmental and Physical Disabilities*, **2008**, 31, 50-9		11
133	Hypothalamic perineuronal net assembly is required for sustained diabetes remission induced by fibroblast growth factor 1 in rats. *Nature Metabolism*, **2020**, 2, 1025-1033	14.6	11
132	Microvasculature of the Mouse Cerebral Cortex Exhibits Increased Accumulation and Synthesis of Hyaluronan With Aging. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2017**, 72, 740-746	6.4	11
131	Paclitaxel Reduces Brain Injury from Repeated Head Trauma in Mice. *Journal of Alzheimeris Disease*, **2019**, 67, 859-874	4.3	10
130	Hyperhomocysteinemic mice show cognitive impairment without features of Alzheimer's disease phenotype. *Journal of Alzheimeris Disease*, **2013**, 35, 59-66	4.3	10
129	Effects of chronic ethanol on brain and serum level of methionine enkephalin. *Peptides*, **2003**, 24, 1935-40	3.8	10
128	Orally administered cyclo(His-Pro) reduces ethanol-induced narcosis in mice. *Pharmacology Biochemistry and Behavior*, **1992**, 43, 939-41	3.9	10
127	Apolipoprotein E Genotype and Sex Influence Glucose Tolerance in Older Adults: A Cross-Sectional Study. *Dementia and Geriatric Cognitive Disorders Extra*, **2016**, 6, 78-89	2.5	10
126	Pharmacologic manipulation of lysosomal enzyme transport across the blood-brain barrier. *Journal of Cerebral Blood Flow and Metabolism*, **2016**, 36, 476-86	7.3	10
125	Assessing blood granulocyte colony-stimulating factor as a potential biomarker of acute traumatic brain injury in mice and humans. *Brain, Behavior, and Immunity*, **2016**, 52, 81-87	16.6	9
124	The SAMP8 mouse for investigating memory and the role of insulin in the brain. *Experimental Gerontology*, **2017**, 94, 64-68	4.5	9

123	Quantitative analysis of chondroitin sulfate disaccharides from human and rodent fixed brain tissue by electrospray ionization-tandem mass spectrometry. *Glycobiology*, **2019**, 29, 847-860	5.8	9
122	The dam breaks: disruption of the blood-brain barrier in diabetes mellitus. *American Journal of Physiology - Heart and Circulatory Physiology*, **2006**, 291, H2595-6	5.2	9
121	Withdrawal from alcohol in withdrawal seizure-prone and -resistant mice: evidence for enkephalin resistance. *Pharmacology Biochemistry and Behavior*, **2001**, 68, 379-87	3.9	9
120	Blind mice are not impaired in T-maze footshock avoidance acquisition and retention. *Physiology and Behavior*, **2002**, 76, 531-8	3.5	9
119	The general anesthesia induced by various drugs differentially affects analgesia and its variability. *Pharmacology Biochemistry and Behavior*, **1988**, 31, 397-403	3.9	9
118	Topiramate Protects Pericytes from Glucotoxicity: Role for Mitochondrial CA VA in Cerebromicrovascular Disease in Diabetes. *Journal of Endocrinology and Diabetes*, **2015**, 2,	4	9
117	Cerebrospinal fluid lipidomics: effects of an intravenous triglyceride infusion and apoE status. *Metabolomics*, **2019**, 16, 6	4.7	9
116	Development of rhenacarborane complexes as central nervous system (CNS) drug delivery agents. *Inorganica Chimica Acta*, **2017**, 466, 139-144	2.7	8
115	Disability in obese elderly women: Lower limb strength and recreational physical activity. *Obesity Research and Clinical Practice*, **2007**, 1, 1-78	5.4	8
114	Evidence that the species barrier of human immunodeficiency virus-1 does not extend to uptake by the blood--brain barrier: comparison of mouse and human brain microvessels. *Life Sciences*, **2005**, 77, 2361-8	6.8	8
113	Mediation of chronic pain: not by neurons alone. *Pain*, **2006**, 124, 1-2	8	8
112	Regional differences in the metabolism of Tyr-MIF-1 and Tyr-W-MIF-1 by rat brain mitochondria. *Biochemical Pharmacology*, **1998**, 55, 33-6	6	8
111	The history of neuropeptide research: version 5.a. *Annals of the New York Academy of Sciences*, **1996**, 780, 1-18	6.5	8
110	CNS effects of peptides: a cross-listing of peptides and their central actions published in the journal Peptides, 1986-1993. *Peptides*, **1994**, 15, 1105-55	3.8	8
109	Effects of various reproductive hormones on the penetration of LHRH across the blood-brain barrier. *Pharmacology Biochemistry and Behavior*, **1992**, 41, 255-7	3.9	8
108	Deficient Leptin Cellular Signaling Plays a Key Role in Brain Ultrastructural Remodeling in Obesity and Type 2 Diabetes Mellitus. *International Journal of Molecular Sciences*, **2021**, 22,	6.3	8
107	Pericytes Suppress Brain Metastasis from Lung Cancer In Vitro. *Cellular and Molecular Neurobiology*, **2020**, 40, 113-121	4.6	8
106	Modulators of IgG penetration through the blood-brain barrier: Implications for Alzheimer's disease immunotherapy. *Human Antibodies*, **2017**, 25, 131-146	1.3	7

105	Adiponectin levels in obese and non-obese middle-aged African-American women. *Obesity Research and Clinical Practice*, **2007**, 1, 1-78	5.4	7
104	Effects of chronic ethanol administration on brain interstitial fluid levels of Methionine-enkephalin as measured by microdialysis in vivo. *Peptides*, **2006**, 27, 2201-6	3.8	7
103	Antisense therapeutics and the treatment of CNS disease. *Frontiers in Bioscience - Landmark*, **2004**, 9, 1720-7	2.8	7
102	Melanocyte-stimulating hormone release-inhibiting factor-1 (MIF-1) can be formed from Tyr-MIF-1 in brain mitochondria but not in brain homogenate. *Journal of Neurochemistry*, **1995**, 64, 1855-9	6	7
101	Effects of peptides: a cross-listing of peptides and their central actions published in the journal Peptides from 1994 through 1998. *Peptides*, **1999**, 20, 1127-38	3.8	7
100	The microvascular extracellular matrix in brains with Alzheimer's disease neuropathologic change (ADNC) and cerebral amyloid angiopathy (CAA). *Fluids and Barriers of the CNS*, **2020**, 17, 60	7	7
99	Molecular Mechanisms of Intranasal Insulin in SAMP8 Mice. *Journal of Alzheimeris Disease*, **2019**, 71, 1361-1373	4.3	6
98	Computational and In Vitro Studies of Blast-Induced Blood-Brain Barrier Disruption. *SIAM Journal of Scientific Computing*, **2016**, 38, B347-B374	2.6	6
97	Protective effects of an anti-melanocortin-4 receptor scFv derivative in lipopolysaccharide-induced cachexia in rats. *Journal of Cachexia, Sarcopenia and Muscle*, **2013**, 4, 79-88	10.3	6
96	Extrahypothalamic effects of leptin: a therapeutic for depression and dementia?. *Endocrinology*, **2011**, 152, 2539-41	4.8	6
95	Transport of antisense across the blood-brain barrier. *Methods in Molecular Medicine*, **2005**, 106, 237-51		6
94	Uptake, content, regulation of plasma concentrations, and binding of Tyr-MIF-1 by the adrenals. *Neuroendocrinology*, **1993**, 57, 541-9	5.6	6
93	Ferrotransferrin and Antibody against the Transferrin Receptor as Potential Vehicles for Drug Delivery across the Mammalian Blood-Brain Barrier into the Central Nervous System. *Methods in Neurosciences*, **1994**, 21, 93-117		6
92	Selective uptake of the somatostatin analog RC-160 across the blood-brain tumor barrier of mice with KHT sarcomas. *Anti-Cancer Drugs*, **1992**, 3, 519-23	2.4	6
91	Intranasal Delivery: Effects on the Neuroimmune Axes and Treatment of Neuroinflammation. *Pharmaceutics*, **2020**, 12,	6.4	6
90	Pituitary adenylate cyclase-activating polypeptide enhances saliva secretion via direct binding to PACAP receptors of major salivary glands in mice. *Anatomical Record*, **2016**, 299, 1293-9	2.1	6
89	A Vagina Monologue: Mom's Stress, Bugs, and Baby's Brain. *Endocrinology*, **2015**, 156, 3066-8	4.8	5
88	The Blood Brain Barrier **2008**, 21-38		5

87	BloodBrain Barrier Transport of Cytokines. *NeuroImmune Biology*, **2008**, 93-107		5
86	The effect of cardiac arrest on the permeability of the mouse blood-brain and blood-spinal cord barriers to PACAP. *Annals of the New York Academy of Sciences*, **2000**, 921, 289-92	6.5	5
85	Influence of ethanol dependence and methionine enkephalin antisense on serum endomorphin-1 and methionine enkephalin levels. *Alcoholism: Clinical and Experimental Research*, **2004**, 28, 792-6	3.7	5
84	Transport of an antifungal trypsin inhibitor isolated from corn across the blood-brain barrier. *Antimicrobial Agents and Chemotherapy*, **2002**, 46, 2633-5	5.9	5
83	Biodistribution of the lipophilic complexes 59Fe(RsalH2)3tach (R = H, NO2 and OMe) and 68Ga(NO2salH2)3tach. *Nuclear Medicine and Biology*, **1996**, 23, 645-52	2.1	5
82	Delayed degradation of Tyr-MIF-1 in neonatal rat plasma. *Peptides*, **1994**, 15, 1561-3	3.8	5
81	Uptake of peptides containing Tyr-Pro by human and mouse erythrocytes. *Biochemical Pharmacology*, **1990**, 40, 607-14	6	5
80	The Blood-Brain Barrier, Oxidative Stress, and Insulin Resistance. *Antioxidants*, **2021**, 10,	7.1	5
79	Pituitary adenylate cyclase-activating polypeptide: Protective effects in stroke and dementia. *Peptides*, **2020**, 130, 170332	3.8	5
78	Modest Blood-Brain Barrier Permeability of the Cyclodextrin Kleptose: Modification by Efflux and Luminal Surface Binding. *Journal of Pharmacology and Experimental Therapeutics*, **2019**, 371, 121-129	4.7	5
77	Effect of controlled cortical impact on the passage of pituitary adenylate cyclase activating polypeptide (PACAP) across the blood-brain barrier. *Peptides*, **2018**, 99, 8-13	3.8	5
76	Comparison of the rate of dedifferentiation with increasing passages among cell sources for an in vitro model of the blood-brain barrier. *Journal of Neural Transmission*, **2020**, 127, 1117-1124	4.3	4
75	Insulin BBB pharmacokinetics in young apoE male and female transgenic mice. *PLoS ONE*, **2020**, 15, e0228455	3.7	4
74	Alpha Adrenergic Induction of Transport of Lysosomal Enzyme across the Blood-Brain Barrier. *PLoS ONE*, **2015**, 10, e0142347	3.7	4
73	In vitro methods in the study of viral and prion permeability across the blood-brain barrier. *Cellular and Molecular Neurobiology*, **2005**, 25, 171-80	4.6	4
72	Study of passage of peptides across the blood-brain barrier: biological effects of cyclo(His-Pro) after intravenous and oral administration. *Annals of the New York Academy of Sciences*, **1994**, 739, 101-7	6.5	4
71	Brain-to-blood transport of peptides and the alcohol withdrawal syndrome. *Annals of the New York Academy of Sciences*, **1994**, 739, 108-18	6.5	4
70	A giant prolactinoma and the effect of chronic bromocriptine therapy on basal and TRH-stimulated serum prolactin levels. *Hormone Research*, **1991**, 35, 167-9		4

69	Peptides and the senescent blood-brain barrier. *Neurobiology of Aging*, **1988**, 9, 48-9	5.6	4
68	Negative allelopathic effects of rutin and quercetin on fourteen soil and enteric microbes. *Biochemical Systematics and Ecology*, **1978**, 6, 1-3	1.4	4
67	Peptide Transport System-1 **1995**, 111-117		4
66	The neurovascular extracellular matrix in health and disease. *Experimental Biology and Medicine*, **2021**, 246, 835-844	3.7	4
65	Interactions of Lipids, Lipoproteins, and Apolipoproteins with the Blood-Brain Barrier. *Pharmaceutical Research*, **2021**, 38, 1469-1475	4.5	4
64	Permeability of the Blood-Brain Barrier to Circulating Free Fatty Acids **1997**, 3-14		4
63	Differentiating the Influences of Aging and Adiposity on Brain Weights, Levels of Serum and Brain Cytokines, Gastrointestinal Hormones, and Amyloid Precursor Protein. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2016**, 71, 21-9	6.4	3
62	Identifying and categorizing spurious weight data in electronic medical records. *American Journal of Clinical Nutrition*, **2018**, 107, 420-426	7	3
61	Drug transport into the central nervous system: using newer findings about the blood-brain barriers. *Drug Delivery and Translational Research*, **2012**, 2, 152-9	6.2	3
60	Endocrine and metabolic changes in human aging. *Journal of the American Aging Association*, **2000**, 23, 103-15		3
59	Novel concepts from novel peptides. *Annals of the New York Academy of Sciences*, **1994**, 739, 1-10	6.5	3
58	Transport of Pituitary Adenylate Cyclase Activating Polypeptide Across the BloodBrain Barrier: Consequences for Disease States and Therapeutic Effects. *Current Topics in Neurotoxicity*, **2016**, 423-432		3
57	Pitavastatin Ameliorates Lipopolysaccharide-Induced Blood-Brain Barrier Dysfunction. *Biomedicines* , **2021**, 9,	4.8	3
56	Leptin and the Blood-Brain Barrier: Curiosities and Controversies. *Comprehensive Physiology*, **2021**, 11, 2351-2369	7.7	3
55	A historical perspective on the interactions of insulin at the blood-brain barrier. *Journal of Neuroendocrinology*, **2021**, 33, e12929	3.8	3
54	The Blood-Brain Barriers **2017**, 5-24		2
53	New horizons for future research - Critical issues to consider for maximizing research excellence and impact. *Molecular Metabolism*, **2018**, 14, 53-59	8.8	2
52	Development of peptide receptor binding assays: methods to avoid false negatives. *Regulatory Peptides*, **2009**, 158, 97-102		2

51	Role of LPS and receptor subtypes in the uptake of TNF by the murine lung. *Life Sciences*, **2001**, 69, 791-802	2.2	2
50	Increase in plasma TYR-MIF-1-like immunoreactivity after hypophysectomy is robust and reversible by corticosterone. *Neuropeptides*, **1995**, 28, 65-71	3.3	2
49	Measurement of phosphorothioate oligodeoxynucleotide antisense transport across the blood-brain barrier. *Methods in Molecular Biology*, **2011**, 789, 337-42	1.4	2
48	Chronic elevation of plasma vascular endothelial growth factor-A (VEGF-A) is associated with a history of blast exposure. *Journal of the Neurological Sciences*, **2020**, 417, 117049	3.2	2
47	Adropin correlates with aging-related neuropathology in humans and improves cognitive function in aging mice. *Npj Aging and Mechanisms of Disease*, **2021**, 7, 23	5.5	2
46	Decoding perineuronal net glycan sulfation patterns in the Alzheimer's disease brain. *Alzheimeris and Dementia*, **2021**,	1.2	2
45	Transcellular routes of blood-brain barrier disruption.. *Experimental Biology and Medicine*, **2022**, 153537022210807	3.7	2
44	The impact of acute rosiglitazone on insulin pharmacokinetics at the blood-brain barrier. *Endocrinology, Diabetes and Metabolism*, **2020**, 3, e00149	2.7	1
43	Methods Employed to Assess Weight Loss in Older Adults by Means of Electronic Medical Records: A Systematic Review. *Journal of Nutrition in Gerontology and Geriatrics*, **2017**, 36, 18-30	2.1	1
42	Foreword. *Current Pharmaceutical Design*, **2015**, 21, 1-2	3.3	1
41	Role of the BloodBrain Barrier in Communication between the Central Nervous System and the Peripheral Tissues **2004**, 73-81		1
40	Mechanisms of Antisense Transport across the BloodBrain Barrier **2004**, 99-105		1
39	Antiaging methods and medicines for the memory. *Clinics in Geriatric Medicine*, **2004**, 20, 317-28	3.8	1
38	Prolonged culturing of iPSC-derived brain endothelial-like cells is associated with quiescence, downregulation of glycolysis, and resistance to disruption by an Alzheimer's brain milieu.. *Fluids and Barriers of the CNS*, **2022**, 19, 10	7	1
37	The S1 protein of SARS-CoV-2 crosses the blood-brain barrier: Kinetics, distribution, mechanisms, and influence of ApoE genotype, sex, and inflammation		1
36	The BloodBrain Barrier and CNS Drug Delivery1-22		1
35	Traumatic Brain Injury Broadly Affects GABAergic Signaling in Dentate Gyrus Granule Cells. *ENeuro*, **2021**, 8,	3.9	1
34	Commentary on the 2018 Named Series on blood-brain interfaces: Roles of neuroimmunomodulation in health and disease. *Brain, Behavior, and Immunity*, **2018**, 74, 3-6	16.6	1

33	Effects of Rapamycin on Insulin Brain Endothelial Cell Binding and Blood-Brain Barrier Transport. *Medical Sciences (Basel, Switzerland)*, **2021**, 9,	3.3	1
32	Chronic Fatigue Syndrome: Possible Integration of Hormonal and Immunological Observations **1997**, 161-192		1
31	Amyloid Beta Pathology Exacerbates Weight Loss and Brain Cytokine Responses following Low-Dose Lipopolysaccharide in Aged Female Tg2576 Mice.. *International Journal of Molecular Sciences*, **2022**, 23,	6.3	1
30	Effects of Stress and Nutrition on Blood-Brain Barrier Functions **2006**, 83-95		0
29	The Next Chapter for COVID-19: A Respiratory Virus Inflames the Brain.. *Brain, Behavior, and Immunity*, **2022**, 101, 286-286	16.6	0
28	Changes in Brain Matrix Glycan Sulfation Associate With Reactive Gliosis and Motor Coordination in Mice With Head Trauma. *Frontiers in Behavioral Neuroscience*, **2021**, 15, 745288	3.5	0
27	Effects of apolipoprotein E isoform, sex, and diet on insulin BBB pharmacokinetics in mice. *Scientific Reports*, **2021**, 11, 18636	4.9	0
26	The Bradykinin B2 Receptor Agonist (NG291) Causes Rapid Onset of Transient Blood-Brain Barrier Disruption Without Evidence of Early Brain Injury.. *Frontiers in Neuroscience*, **2021**, 15, 791709	5.1	0
25	Age and cognitive diagnosis influence cerebrospinal fluid ketone levels after a triglyceride infusion in older adults. *Alzheimeris and Dementia*, **2020**, 16, e037716	1.2	
24	Diseases Mediated by the BBB: Alzheimer, Obesity, and Beyond **2013**, 1667-1671		
23	Ingestive Peptides **2013**, 1677-1681		
22	Control and Contributions of the Blood Brain Barriers to Cytokine Levels in the CNS **2013**, 88-98		
21	Gut-brain communications: not the same at all ages. *Endocrinology*, **2010**, 151, 852-4	4.8	
20	Insulin and the Blood-Brain Barrier **2007**, 265-285		
19	Leptin, Insulin and Blood-Brain Barrier Relations in Obesity **2005**, 199-215		
18	Commentaries on Insulin Resistance, Affective Disorders, and Alzheimer's Disease: Review and Hypothesis and Authors' ResponseCommentary. *Journals of Gerontology - Series A Biological Sciences and Medical Sciences*, **2004**, 59, M184-M185	6.4	
17	Other Dementias1111-1133		
16	Saturable transport of the neurokinin-1 non-peptide antagonist LY303870 across the rat blood-brain barrier after intravenous administration. *Life Sciences*, **2001**, 69, 1683-9	6.8	

15	Psychologic profiles as predictors of success in a cardiovascular risk factors life-style intervention program. *Southern Medical Journal*, **1996**, 89, 971-6	0.6
14	The blood-brain barrier: methods for the study of peptide transport mechanisms. Introduction to Part II. *Annals of the New York Academy of Sciences*, **1994**, 739, 87-8	6.5
13	The Role of the Blood-Brain Barrier in Feeding: Leptin **2006**, 27-37	
12	Viable human brain microvessels for the study of aging and neurodegenerative diseases. *Microvascular Research*, **2021**, 140, 104282	3.7
11	The Effect of Cardiac Arrest on the Blood-Testis Barrier to Albumin and Tumor Necrosis Factor-Alpha in the Mouse. *The Showa University Journal of Medical Sciences*, **2000**, 12, 119-125	0.1
10	Diseases Mediated by the BBB: From Alzheimer's to Obesity **2006**, 1475-1479	
9	Ingestive Peptides and the Blood**B**rain Barrier **2006**, 1455-1459	
8	1958-P: Role of Leptin in Blood-Brain Barrier Dysfunction. *Diabetes*, **2019**, 68, 1958-P	0.9
7	1795-P: Novel Techniques for the Analysis of Brain Chondroitin Sulfates in Rodents and Humans with Type 2 Diabetes. *Diabetes*, **2019**, 68, 1795-P	0.9
6	1771-P: Hypothalamic Perineuronal Net Assembly Is Required for Sustained Diabetes Remission Induced by FGF1. *Diabetes*, **2020**, 69, 1771-P	0.9
5	Science, Citation, and Funding. *Science*, **1991**, 251, 1410-1410	33.3
4	Ischemia Accentuates the Transfer of Interleukin-1 Across the Blood-Brain Barrier in the Ovine Fetus. *FASEB Journal*, **2012**, 26, 707.1	0.9
3	Relationship of Clinical to Basic Research with Peptides as lllustrated by MSH **1986**, 645-652	
2	Quantifying altitude of human habitation in studies of human health using geographical name server data. *Geospatial Health*, **2016**, 11, 463	2.2
1	F4-01-04: APOE GENOTYPE INFLUENCES BRAIN TO BLOOD GLUCOSE RATIOS AFTER HIGH FAT FEEDING **2018**, 14, P1383-P1383	